

FARM AND GARDEN



IMPORTANCE OF ROTATION.

The Minnesota and the North Dakota experiment stations have experimented extensively with different rotations and very interesting conclusions are given as follows:

"Wheat grown continuously for four years removed annually 25 pounds of nitrogen per acre, while 146 pounds more were lost. This nitrogen was lost by the oxidation of the humus, by denitrification chemically, by wind storms, and through the loss of nitrates by drainage. As a crop of spring wheat occupies the ground during a short period of the year, it may be seen that during the greater part of the year the other factors are at work in eliminating this element. In a rotation of wheat, clover, wheat and oats, an average of 178 pounds of nitrogen per acre was removed annually, yet there was a gain for four years over and above this amount of 245 pounds of nitrogen.

"This nitrogen, it is believed, has been gained largely by the clover from the free nitrogen of the air. In this rotation not only was the nitrogen and humus content of the soil increased, but larger crops were grown.

"The North Dakota station has taken up the study of a suitable rotation for the wheat farms. Experiments carried on for six years show that continuous wheat culture is unprofitable, while wheat in rotation increases in yield and improves in quality. Three crops of wheat and one of clover gave in four years almost as much wheat and more profitable returns than four crops of wheat in succession. Little was gained in rotating wheat with other cereals, as spring rye, barley and oats, but wheat after a cultivated crop gave a larger percentage of increase than wheat after summer, fallowing millet, timothy and clover, flax, field peas or peas and millet. The increase in the wheat crop over wheat after wheat was as follows:

"After cultivated crops, 75 per cent; after fallow, 63 per cent; after millet, 1 per cent; and after timothy and clover, 33 per cent. When a cultivated crop, will only pay for the labor of its production it is better than summer fallowing, as the succeeding wheat crop will show.

"A rotation for dairy farms recommended by the New Jersey station consists of (1) field corn, seeded to crimson clover in July or August; (2) crimson clover followed by fodder corn, land seeded to winter rye; (3) rye fodder, followed by oats and peas, seeded to red clover and timothy; and (4) hay.

"Some of the reasons for crop rotation are: All plans do not draw to an equal extent upon the manurial ingredients of the soil. They send their roots to different depths and have a different solvent action upon the constituents they reach. By rotating crops insect enemies are more apt to be dispersed. Fungus diseases may also be materially reduced. The soil is maintained in good tilth, and bacteria which are beneficial to the plants are more likely to be increased. Weeds are more readily eliminated, the humus compounds of the soil increased, and the work of the farm more easily distributed."—United States Department of Agriculture.

THE WATERING OF HORSES.

The question as to the best time for watering horses is often asked, and is answered in a number of different ways according to the individual opinions of the authority consulted. Many feeders believed that horses should be watered before feeding, while others are equally certain that feeding should precede watering. C. F. Langworthy, in a very useful bulletin, entitled "Principles of Horse Feeding," summarizes the results of some recent experiments which he believes have reached the truth of the matter.

The rations fed consisted of different mixtures of corn, oats, hay and straw, and a number of experiments were made, in which the only condition that varied was the time of watering. In some of the tests the horses drank before and in some after eating, and in others after the grain portion of the ration was eaten, but before the hay.

So far as was observed, the time of drinking had no effect on the digestibility of a ration of grain and hay. When hay only was fed there seemed a slight advantage in watering before feeding. The general conclusion was drawn that horses may be watered before, during or after meals without interfering with the digestion and absorption of food. All these methods of watering are equally good for the horse, and each of them may be employed according to circumstances. It is obvious that certain circumstances may make it necessary to adopt one or the other method. For instance, after severe loss of water, such as occurs in consequence of long continued, severe exertion, the animal should always be allowed to drink before he is fed, as otherwise he will not feed well.

It has been found that less water is required when the ration consists largely of concentrated feed than when large amounts of coarse fodder are consumed, and it is a matter of common observation that less water is consumed when green, succulent feeds

form a considerable part of the ration than when it consists of dry feed. That the amount of water taken, even in dry feed, may be considerable is shown by the fact that a ration of twelve pounds of oats and fifteen pounds of hay furnishes some twenty pounds of water. A succulent ration would furnish much more.

CHOOSING A DAIRY COW.

In the year book of the Idaho State farmers' institutes C. L. Smith describes an ideal dairy cow thus: "She should have a big mouth, thick lip large nostrils, a smooth-dished face, wide forehead, large, prominent eyes thin on neck and shoulder, but widening down, fore legs wide apart, so wide that one might crawl between them full chest, sharp back wedge-like, backbone rather prominent, ribs to start away from the backbone; that is to slant away and have two ribs right over small of barrel, far enough apart so that the open flat hand will go in between them. This is a particularly good indication of a large milker. The swell of ribs, paunch, should be large with a heavy muscle running from hip joint diagonally down across the abdomen; cow should be broad on hip and well developed over hip; hind legs well apart, with good show of udder back of them, extending well up; under udder to begin well in front; but discard a cow that has a meaty, fleshy udder the ideal formation being circle shape with the four teats well apart and square on end, and this indicates an easy milker, while, where the udder is well quartered up and the teats are big at shoulder and pointed, it denotes a hard milker. The vein that runs from the udder to the heart should be large. If this vein is small and straight, look out. On the contrary, if big and crooked, it indicates a heavy milker. Notwithstanding all these 'good signs,' the final test is the milk pail and the Babcock test, because there are exceptions to all rules."

POULTRY POINTERS.

Keep an egg record.
Sort out the drones.
Profit by others' failures.
Never market poor stock.
Don't raise too many breeds.
Always feed at regular hours.
A fat hen is queen on the market.
You cannot keep the place too clean.
Trap nests prevent crowding in the nest.

Old hens are not profitable on an egg farm.
Avoid getting hens over fat for the egg farm.

The busy hen is the laying hen.
Keep them busy.
Hens over two years old are of very little use for eggs.

As the weather gets warm lessen the feed of corn.
Never try to keep fifty fowls when you have room only for twenty-five.

Poultry is a fine study for any one and teaches valuable lessons.
In breeding be careful not to drop utility points to get standard.

Does the insurance policy permit you to run the incubator in the house?
Cockle is said to be poisonous. Toss much of it is apt to kill the fowls.

Roiled oats are good to push those little chicks. It makes them grow.
Eggs for the market should be washed clean; they look better and sell better.

Better buy good wheat and pay a full price than to buy screenings at half price.
Respect the brooding hen. Harsh methods should never be used to break her up.

Don't feed too many of so-called poultry foods. Some are good and some are not.

BROILERS NEED WARMTH.

The broiler season, when in full swing, calls to mind the advice that many of those who raise broilers will lose quite a few by not keeping them warm. Of course, the broilers need fresh air, but there is a doubt as to whether they need an artificial ventilation during cold weather, as it is next to impossible to keep the fresh air from creeping in somewhere. Air is important, but have as your motto "Keep the chicks warm," and there is every reason to believe that you will succeed in raising a goodly lot of them.

Most of the poultry books give the temperature at which the houses should be kept, but I believe the chicks know best and I have always let them be their own thermometer. When they huddle up together they need more heat, and when they look drowsy and appear to have no ambition in life they are too warm.

Cat's Salary Raised.

Some time ago the cat of the St. Paul postoffice made a record by slaying 125 rats and mice in one month says the Ladies' Home Journal. In recognition of her abilities the postmaster wrote to Washington, asking an increase in her salary, and she now receives \$10.40 a year. Soor after she showed her gratitude by presenting the government with five kittens, each of which entered the United States service as soon as it was old enough to tackle a rat.—New York World.

Japan's rice crop for this year is estimated to exceed by 20 per cent, the average annual crop.



NEW YORK'S ITALIAN BRIDES.

In one of the popular churches on Baxter street, in the centre of the downtown Italian colony, the marriage record reached the startling proportion of from twenty to thirty a day, and more on Sundays, during the early spring months. The summer is comparatively marriageless, but during the last of October and the months following until the new year the record reaches its zenith again.

The Italian believes in love, and he also believes in early marriages. Many of the girls put on the veil and orange blossoms when only fourteen years old. With the Italian marriage is a duty. There is an old saying that an unmarried man is no man. Single women are absolutely unknown. Even with the progressive Italian born on American soil, a bachelor girl, with her characteristic independence, would be a monstrosity.

The Italian girl has a much easier time with her trousseau than has her American sister, for it is the duty of the Italian bridegroom to furnish both the wedding dress and the going-away gown. As the conventional honeymoon and going-away custom has not yet come in style with the Italians, the latter dress is worn on the first public appearance of the bride after the wedding. The only other place on the American continent where the bridegroom furnishes the wedding outfit is among the Zuni Indians, where the man weaves it.

The ceremony over, carriages convey the party from the church to the house or hall where the celebration is to be held. A hall is generally hired for a few hours or for the evening, and this is the most approved method, although many who cannot afford this elegance of a hired hall very sensibly hold their jollification in their own place, however small. It is almost incredible how many Italians can crowd into a small room and still leave space for dancing.

HOMELY GIRL IS A JEWEL.

We all know the homely girl. She isn't pretty, has no parlor tricks, couldn't do a skirt dance to save her life, and never can learn to score at bridge.

But it's surprising what an uncommonly good time some simple, kind and homely girls manage to have.

The homely girl gets most charming country house invitations because she never spoils sport, and she is like one of the family. If a man is paying attention to a daughter of the house, she doesn't try and cut her out—"like that little cat Ella, who shall never be asked again."

The kind, homely girl isn't too grand to help her hostess in simple domestic matters.

If anybody in the house is ill, she is such a help in her quiet, unobtrusive way.

Convalescents ordered to charming health resorts to recruit ask the homely girl to go with them.

She is a jewel in plain setting. She never patronizes anybody, and will enjoy the most simple pleasures without an air of "I have been used to much grander entertainments."

You are never ashamed of setting a picnic scramble meal, "because cook is ill or jam making," before the homely girl. When she leaves your house you know she won't make ill-natured remarks. If she discovers the skeletons in the family cupboards, nobody will ever hear of them.

Smarter girls are like brilliant, scentless flowers which attract attention. But people don't want to possess them because they have no perfume. The homely girl twins like the honey-suckle about people's hearts. And she often marries remarkably well.—New York Evening News.

SLEEVES FOR EVENING COATS.

Evening coat sleeves are at their largest extreme. In fact, it is the dolman type, with sleeve lost in the draperies of the rest of the garment, that have led the cape to the fore again. The hood is a favorite with the most elaborate wraps, its expansive surface providing a resource for the display of furs and other garnitures.

Moreover, with the wide flowing nether portion of the long wraps the hood helps to keep balanced the proportion between skirt and hem and shoulder. The Capuchin hood, often varied almost beyond recognition of the original type, still sees the light, although its vogue has been a fluctuating one for two years.

The Capuchin hood of this season, however, has less of a hugging effect than its prototype. In shoulders as well as skirt effects all tend towards the flowing, and this brings into renewed favor capes—single, double and triple. These capes are often edged with chenille fringe, a revived old favorite.

The shawl points have been somewhat overdone, but are still seen in double cap-mantles which have deep points at both back and front. Edges of such garments are left raw or are finished with fancy galloons.

Voluminous and elaborate as some of the evening coats are they are lighter in weight than many garments that appear far less bulky before "chiffon" materials were a requirement. Velvet, silks and cloths are all as this and supple as the manufacturer can

produce. Even the furs are allowed not a vestige of clumsiness or stiffness.—Philadelphia Telegraph.

HOW TO COOK HUSBANDS.

"A good many husbands are utterly spoiled by mismanagement in cooking, and so are not tender and good. Some women go about as if their husbands are bladders and blow them up, others keep them constantly in hot water. Others let them freeze by their carelessness and indifference. Some keep them in a stew by irritating ways and words. Others roast them. Some keep them in a pickle all their lives. It cannot be supposed that any husband will be tender and good mannered this way; but they are really delicious when properly treated. In selecting your husband you should not be guided by silvery appearance, as in buying mackerel; nor by the golden tint, as if you wanted salmon. Be sure and select him yourself, as tastes differ. Do not go to the market for him, as the best are always brought to the door. It is far better to have none unless you patiently learn how to cook him. A preserving kettle of the finest porcelain is best, but if you have nothing but an earthenware pipkin, it will do, with care. See that the linen in which you wrap him is nicely washed and mended, with the required number of buttons and strings nicely sewed on. Tie him in the kettle by a strong silken cord called comfort, as the one called duty is apt to be weak. They are apt to fly out of the kettle and be burned and crusty on the edges, since, like crabs and lobsters, you have to cook them while alive. Make a clear, steady fire out of love, neatness and cheerfulness. Sit him as near this as seems to agree with him. If he should sputter and fizz, do not be too anxious; some husbands do this till they are quite done. Add a little sugar in the form of what confectioners call kisses, but no vinegar or pepper on any account. A little spice improves them, but it must be used with judgment. Do not stick any sharp instrument into him to see if he is becoming tender. Sit him gently, watch the while lest he be too flat and close to the kettle and so become useless. You cannot fail to know when he is done. If thus treated you will find him very digestible, agreeing nicely with you and the children, and he will keep as long as you want, unless you become careless and set him in too cold a place."

SHORT WALKING SKIRT.

For the short skirt walking frock or costume one of the fine, durable supple velveteens is a serviceable as well as a fashionable material, and delightful coat and skirt frocks of velveteen are fashionable for wearers of all ages, from schoolgirl to matron. Braid matching the velveteen in color appears upon a majority of the frocks but bands of motifs of cloth or silk, heavy crochet passementeries and ornaments and bouillonnés or other self trimmings of the velveteen are also liked.

With these costumes are worn blouses of crepe de chine, lightweight lustrous silk lace or chiffon cloth, simple in line, but dainty in detail. The modish blouse matches the costume in color, but the dyed lace blouse of last season is not so popular with the exclusive dressmakers as it once was.

It is still much used, but has fallen from the fastidious few to the crowd. Chiffon cloth or heavy net matching the frock in color is the blouse material of many of the imported three-piece costumes, but the satin-finished silk and crapes are more durable and quite light enough in weight for comfort in our overheated houses. Lace relieves the dark hue of the blouse at the throat, and wrists, and if any note of contrasting color appears in the trimming of coat and skirt, that color is echoed in the blouse.

What has been said of the velveteen frock applies as well to the street frock of chiffon velvet. Both in velveteen and in chiffon velvet, the length of the skirt depends on the use to which it is to be put.—Indianapolis News.

How to Plant Nasturtiums.

Nasturtiums should not be planted out of doors until all danger of frost is over, as they are very sensitive to cold, but the seeds may be given a good start indoors.

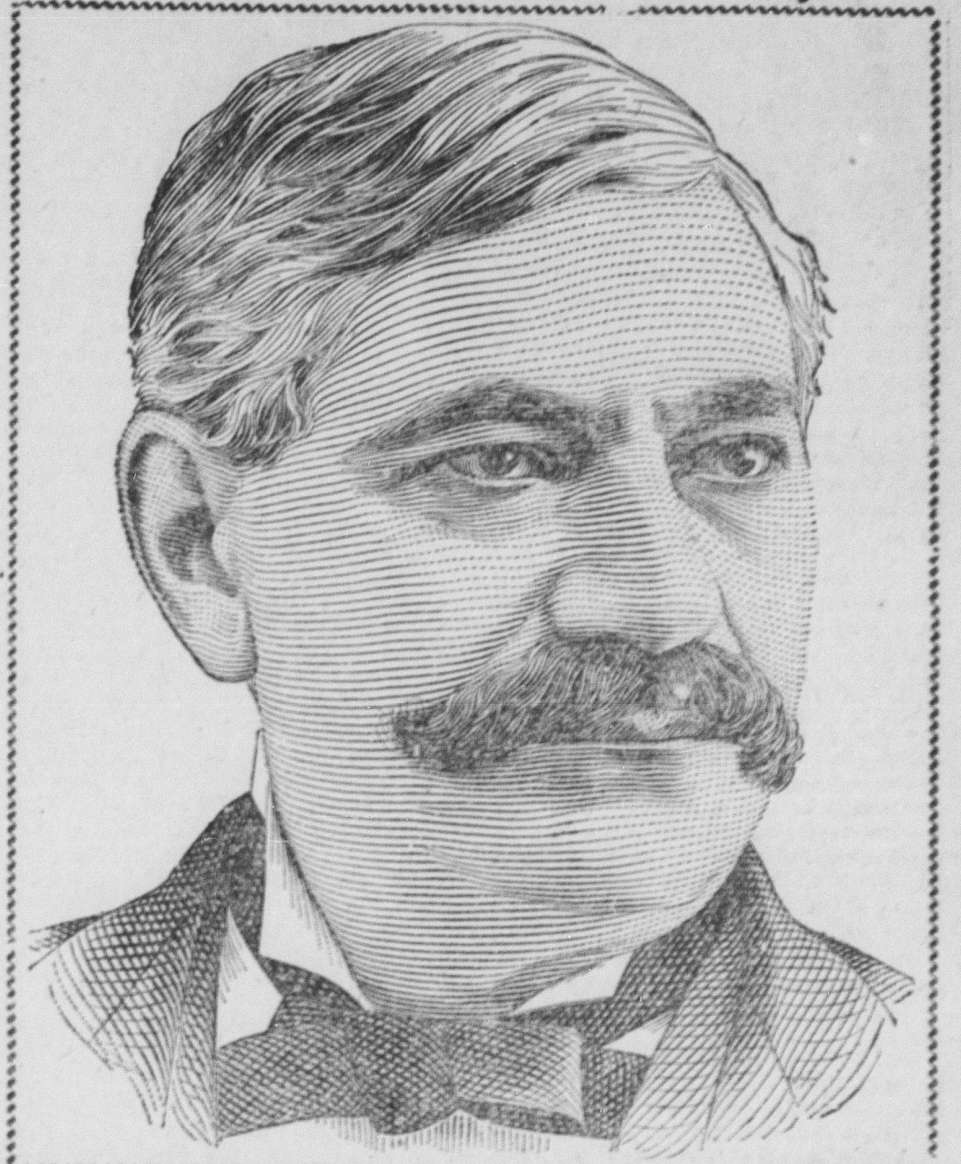
Save a number of empty eggshells, fill these with kitchen garden soil, previously sifted and mixed finely, and place in each shell a nasturtium seed that has been soaked in tepid water a few minutes to insure the seed's germinating. Set the eggshells in a pan of earth or sawdust closely together.

When transferring the tiny plants to their outdoor quarters the growth is not hindered an instant, as the eggshell is cracked readily, and the compact soil placed immediately in the spot prepared for it. Shade from the sun for the first few days with a muslin awning.—Suburban Life.

The first Japanese newspaper was published in 1863, only forty-one years ago, and contains some news translated from the Dutch papers. To-day Japan has 1,500 daily newspapers and periodicals.

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